AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) ~~Method~~ A method of heating a container (Ri) placed on a cooktop comprising heating means (11) respectively associated with inductors forming means [[(11)]] for detecting [[the]] a presence of [[a]] the container, said heating means associated with said inductors forming a two-dimensional array on the cooking surface, ~~characterized in that it comprises the following steps~~ comprising:

– a step (E20) of searching for a heating area (Zi) consisting of a set of heating means at least partly covered by said container; and

– a step (E60) of calculating a power (Pj) delivered by each heating means (Ij) in said heating area (Zi) as a function of an overall set point power (Pi) associated with said heating area (Zi) and a rate of coverage (Tj) by the container (Ri) of each detection means (Ij) associated with said heating means (Ij).

2. (currently amended) ~~Heating~~ The heating method according to claim 1, ~~characterized in that it~~ the method further ~~comprises~~ comprising a preliminary step (E10) of declaring the addition of said container to the cooking surface.

3

3. (currently amended) ~~Heating~~ The heating method according to claim 1, ~~characterized in that it comprises~~ the method further comprising a step (E70) of detecting movement of a container (Ri) associated with an initial heating area (Zi) and a step (E80) of searching for a shifted heating area (Z'i) consisting of heating means respectively associated with detection means at least partly covered by said container (Ri).

4. (currently amended) ~~Heating~~ The heating method according to claim 3, ~~characterized in that it further comprises~~ the method further comprising a step (E110) of associating said overall set point power (Pi) associated with the initial heating area (Zi) with the shifted heating area (Z'i).

5. (currently amended) ~~Heating~~ The heating method according to claim 1, ~~characterized in that~~ wherein the search step (E20, E80) comprises for each successive detection means of the cooking surface a test step (E26, E36, E96) for detecting the presence of a container (Ri) over said detection means and, if such presence is detected, a step (E27, E37, E87) of adding the heating means associated with said detection means to the heating area (Zi, Z'i).

6. (currently amended) ~~Heating~~ The heating method according to claim 5, ~~characterized in that~~ wherein the search

step (E20, E80) comprises, for each successive detection means of the cooking surface, a preliminary test step (E23, E33, E93) for detecting if said heating means associated with said detection means belongs to another heating area, and said test steps (E26, E36, E86) and addition steps (E27, E37, E87) are executed if said heating means associated with said detection means do not belong to another heating area.

7. (currently amended) ~~Heating~~ The heating method according to claim 5, characterized in that the search step comprises a step (E28, E38, E88) of memorizing for each heating means added to the heating area (Zi, Z'i) a rate of coverage (TREC) by a container of the detection means associated with said heating means.

8. (currently amended) ~~Heating~~ The heating method according to claim 5, ~~characterized in that,~~ wherein if said heating area includes at least one added heating means, the search step (E20, E80) comprises a step (E39, E82) of determining a list of heating means not belonging to another heating area and adjoining at least one heating means of said heating area, and said test and addition steps are executed for each heating means from said list.

9. (currently amended) ~~Heating~~ The heating method according to claim 5, ~~characterized in that~~ wherein in the test step (E26, E36, E86) the presence of a container above the detection means is detected if the rate of coverage of said detection means is greater than a predetermined threshold value.

10. (currently amended) ~~Heating~~ The heating method according to claim 9, ~~characterized in that~~ wherein said predetermined threshold value is equal to 40%.

11. (currently amended) ~~Heating~~ The heating method according to claim 1, ~~characterized in that~~ wherein said heating means (11) are inductors (11) forming means for detecting the presence of the container (Ri).

12. (currently amended) ~~Cooktop~~ A cooktop configured to execute the method of heating of claim 1, comprising:

the heating means (11) respectively associated with the inductors forming induction detection means [[(11)]] for detecting the presence of [[a]] the container, said heating means associated with said inductors forming a two-dimensional array on a cooking surface[[,]]; ~~characterized in that it~~

means for searching for the heating area formed from the heating means at least partially covered by the container; and

means for calculating the power delivered by each heating means ~~comprises means adapted to execute the heating method according to claim 1~~.

13. (currently amended) ~~Cooktop~~ The cooktop according to claim 12, ~~characterized in that~~ wherein the heating means (11) ~~consist of~~ is formed from inductors [[(11)]] forming a two-dimensional array on the cooking surface.

14. (currently amended) ~~Heating~~ The heating method according to claim 2, ~~characterized in that it comprises~~ the method further comprising a step (E70) of detecting movement of a container (Ri) associated with an initial heating area (Zi) and a step (E80) of searching for a shifted heating area (Z'i) consisting of heating means respectively associated with detection means at least partly covered by said container (Ri).

15. (currently amended) ~~Heating~~ The heating method according to claim 14, ~~characterized in that it further comprises~~ the method further comprising a step (E110) of associating said overall set point power (Pi) associated with the initial heating area (Zi) with the shifted heating area (Z'i).

16. (currently amended) ~~Heating~~ The heating method according to claim 6, ~~characterized in that~~ wherein the search

step comprises a step (E28, E38, E88) of memorizing for each heating means added to the heating area (Zi, Z'i) a rate of coverage (TREC) by a container of the detection means associated with said heating means.

17. (new) A cooktop, comprising:

at least one heater associated with inductors forming an induction detector for detecting a presence of a container, said at least one heater associated with said inductors forming a two-dimensional array on a cooking surface; and

a cooktop management system configured for searching for a heating area formed from the at least one heater at least partially covered by the container, the cooktop management system being adapted to calculate a power delivered by each heater, wherein the cooktop management system is also configured to:

search for the heating area formed from a set of the heaters at least partly covered by said container, and

calculate the power delivered by each heater means in said heating area as a function of an overall set point power associated with said heating area and a rate of coverage by the container of each detector associated with the at least one heater.